

《研究ノート》

The Efficacy of English E-Learning as Preparatory Training for Study Abroad

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ABSTRACT

This is a preliminary report on whether English e-learning is effective as preparatory training for the study abroad program at Kobe Pharmaceutical University (KPU). In the 2-week KPU study abroad program, the students study English conversation and visit pharmaceutical facilities in Boston, Massachusetts. The first English preparatory training, conducted in February 2012, is examined in this paper. Fourteen students were given English e-learning assignments in addition to a face-to-face lecture as preparatory training before the 2-week KPU study abroad program. A questionnaire was given to the students after they returned to Japan. The efficacy of the English preparatory program using e-learning was examined according to the students' feedback.

Key words: Study abroad, Preparatory training, E-learning, English, Pharmacy

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BACKGROUND

Benefit of study abroad in university education

Experience in study abroad provides not only language skills but huge value to students, which cannot be gained in a classroom environment. Those students who study abroad interact with people in the host countries, cope with unexpected problems caused by cultural differences, and eventually become more flexible and adaptable as well as better speakers of the target languages. Studies have reported that multicultural experience enhances creativity (Maddux and Galinsky, 2009; Shaftelet et al., 2007; Tadmor, Galinsky, Maddux, 2012). The benefit of study abroad has been recognized in university education (Carlson and Widaman, 1988; Shaftelet et al., 2007).

In recent years there has been increasing appeal for students to participate in meaningful international educational experiences during their university careers. Students who study abroad are expected to show improvement in attitudes related to international knowledge. Such attitudes and associated skills may also benefit them in other career-related ways, such as the development of broader multicultural awareness and respect for diversity (Shaftelet et al., 2007).

Universities are increasingly aware of the importance of making a study abroad program a part of their educational prospectus. The Japanese Ministry of Education, Culture, Sports, Science, and Technology (MEXT) has been promoting internationalization of university education in Japan by supporting long-term study abroad programs (MEXT website).

Study abroad program in medical education

Study abroad is beneficial in career education (Shaftelet et al., 2007; Zehry, Halder, and Theodosiou, 2011). It is important for universities in medical fields to provide study abroad opportunities for their students to give them a chance to learn foreign languages and develop

multicultural awareness. Such experiences are significant for medical students because they will be expected to care for foreign patients from diverse cultural backgrounds after they graduate. Tamamaki and Nishio reported that there was a significant correlation between the frequency of Japanese medical doctors' seeing foreign patients and having the experience of studying abroad (Tamamaki and Nishio, 2013). There was also a significant correlation between having the experience of studying abroad and the doctors' self-evaluation of their English ability. They argued that the study abroad experience might encourage Japanese medical doctors to treat foreign patients and have confidence in interacting with foreigners (Tamamaki and Nishio, 2013).

To date there have been no comprehensive studies reporting the state of current study abroad programs in Japanese universities, especially universities in medical fields. Funded by MEXT, the author is currently conducting a questionnaire survey on the status of study abroad programs provided by pharmaceutical universities for their students (Grant-in-Aid for Scientific Research (C) No. 25370673).

Study abroad program at Kobe Pharmaceutical University

Kobe Pharmaceutical University (KPU) started its 'Pharmaceutical Study Abroad Program (*kaigai yakugaku kenshu*)', a 2-week study abroad program in Boston, Massachusetts, in 2012. It is a credited subject, and 14 3rd- and 4th-year students have been selected as participants each year. During the program in Boston, the students take English conversation lessons and lectures on pharmacy, and visit hospitals and local drug stores in Boston. The program also includes a visit to and student exchange at the Massachusetts College of Pharmacy and Health Sciences (MCPHS) (Appendix 1). It is a unique study abroad experience in that it provides students with rare opportunities to interact with pharmacists and other medical workers, researchers, and pharmaceutical students. It is therefore a popular program among KPU

students who hope to work in international environments or are interested in international exchanges. KPU has been conducting this program for 3 years, and every year more than 40 students apply for the program.

English program as preparation for the study abroad program

Prior to the study abroad program, the students are assigned to take preparatory lectures (Appendix 2), in which English is one of the core subjects. The English program consists of an in-class lecture and self-study assignments using an e-learning system and the web site of the MCPHS. The self-study assignments enable the students to be exposed to English for a sufficient time before leaving for Boston. The details of the e-learning assignments are discussed below.

E-learning system at KPU

KPU recently introduced 51 desktop computers and the e-learning system, ALC NetAcademy2, receiving a subsidy from MEXT in 2012 for private universities to activate and improve their education, research, and equipment (*Heisei 24 nenndo shiritsu daigaku kyoiku kenkyu kasseika setsubi seibi jigyo*).

Three courses from ALC NetAcademy2 were installed: 'Super standard course', 'Medical English course', and 'Life science course'. The 'Super standard course' consists of 50 listening units and 50 reading units that are designed to prepare for the Test of English for International Communication (TOEIC). The 'Medical English course' is designed to study basic medical English and consists of a vocabulary section, a listening section, and a reading section. The 'Life science course' is for advanced learners to study how to read research articles.

In 2013, two English classes that use the e-learning system started in the curriculum for the 2nd-year students. In addition to the on-campus credited classes, all students are

encouraged to study English using the e-learning system, especially the 'Super standard course', with the aim of achieving higher scores on the TOEIC. We have been seeking better ways to motivate students to study English by e-learning.

The purpose of this paper

It has been only two years since the commencement of the English preparatory program and the English e-learning system at KPU, so we are still in an ongoing 'trial and error' process. This paper reports the students' feedback about the first English preparatory program using the English e-learning system in March 2013. The purpose is to examine the efficacy of the English preparatory program for the study abroad program using the English e-learning system.

METHODS

Participants

Eleven 4th-year students (two men and nine women) and three 3rd-year students (three women) who participated in the KPU study abroad program in March 2013.

Methods

The 14 students were assigned to take preparatory lectures 1 month before the study abroad program (Appendix 2).

English was one of the core subjects of the preparatory lectures. The English program consisted of a brief guidance in November 2012, a listening assignment on the MCPHS web site, a 90-min lecture in March 2013, and self-study assignments using the e-learning system, Net Academy2.

In November 2012, the students received brief guidance about the English preparatory training and were given the assignment of listening to the pharmaceutical students at MCPHS speaking in English at a natural speed. The students were assigned to write down the outline of the statements by pharmaceutical students at MCPHS.

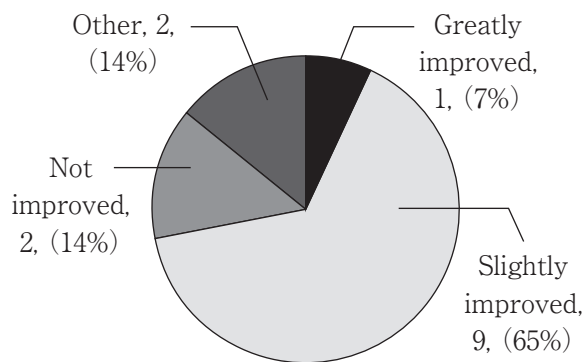
In February 2013, students attended an in-class English lecture for 90 min, which involved a review of the students' listening assignments from the MCPHS web site. Students were also given guidance about using the English e-learning system (ALC NewAcademy2), and were assigned to use the e-learning system to study English (Appendix 3). The students studied English for 23 days until they left for Boston.

After they returned from Boston a questionnaire was distributed to students, asking them whether the e-learning assignment was helpful (Appendix 4).

RESULTS

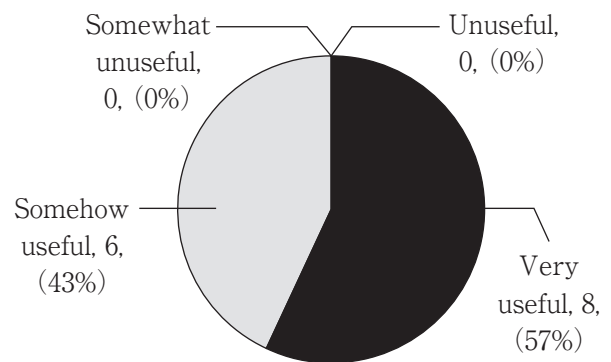
The students were asked about the efficacy and usefulness of the English e-learning. Among the 14 students, 72% answered that they felt the English e-learning of ALC NetAcademy2 improved their listening ability (Figure 1). All of the students answered that the English e-learning was useful for their study abroad experience (Figure 2). Ninety-two percent of the students answered that the listening assignment on the MCPHS web page was useful (Figure 3).

The students were further asked about the teaching/learning style of using the English e-learning system, and whether they encountered any trouble while using the system. None of the students reported any trouble, and all of them answered that face-to-face guidance was necessary before they were given the e-learning assignment (Figure 4). Regarding the length of 23 days allowed for the e-learning in 2013, 29% of the students answered that it was too short



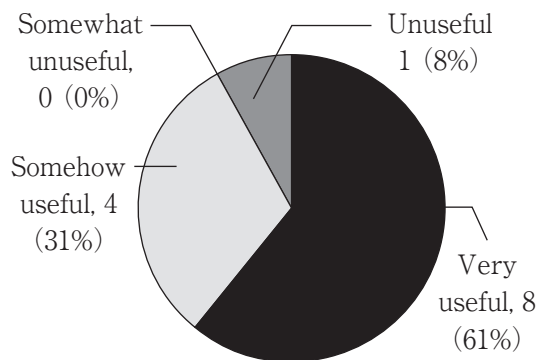
Did the English e-learning listening improve your listening ability? (n=14)

Figure 1



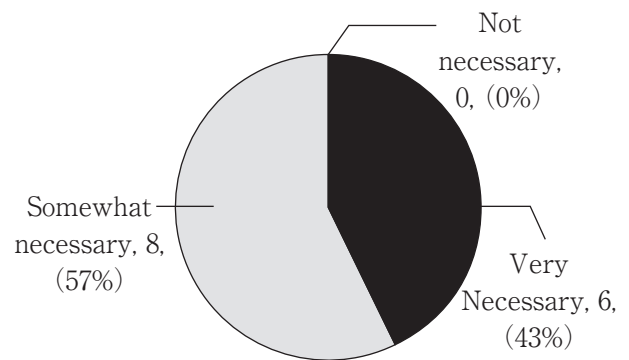
Was the English e-learning listening helpful for the study abroad (n=14)

Figure 2



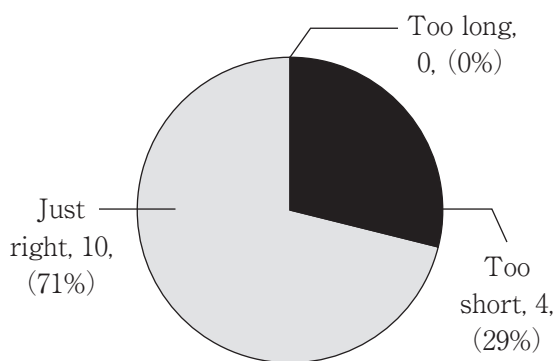
Was the MCPHS listening useful for the study abroad? (n=14)

Figure 3



Is guidance before self-study of e-learning necessary? (n=14)

Figure 4



The length of e-learning (23 days)

Figure 5

and 71% that it was adequate (Figure 5).

DISCUSSION

The results of this study suggest that English preparatory training using e-learning was efficacious for the participants in the KPU study abroad program.

The definition of e-learning varies (Aoki et al., 2012). The e-learning in the KPU program refers to web-based training that uses the English learning system, ALC NetAcademy2, and web-based learning that uses the MCPHS web page as a listening accessory.

The merits of e-learning from the learner's perspective include (1) flexibility of location for learning, (2) flexibility of time for learning, (3) flexibility of pace of learning, (4) ease of repeated learning, and (5) learner centeredness, whereby learners can choose content and function according to their needs and interests (Aoki et al., 2012). These merits are consistent with the positive feedback of the students in the KPU program. It is almost impossible to provide sufficient exposure to English via in-class lectures as preparation training for study abroad. E-learning enables the students to learn English whenever they wish and anywhere they have access to a computer and Internet connection. Students therefore can obtain exposure to English to the level necessary as preparation for study abroad. E-learning also enables the students to work at their own pace and to learn repeatedly. These characteristics may explain the results of this study showing that most students felt that e-learning helped improve their listening ability.

Despite its great advantages, however, e-learning alone cannot provide satisfactory tutelage. Blended learning, whereby online learning and face-to-face learning are combined (blended) in a session, is recommended for a better educational outcome (Miyaji et al., 2009). In blended learning, students self-study basic knowledge online and teachers provide additional

knowledge through other reading material or offer interactive learning among students. At KPU we have been conducting our English lessons in a blended learning style ever since we first introduced the e-learning system. The English preparatory training for Boston was also conducted in the blended learning style. We first gave the e-learning self-study assignment of listening to the MCPHS web page and then held a lecture to review the assignment. We then gave guidance on how to use the e-learning system and ALC NetAcademy2, and assigned the students to self-study of the e-learning listening material. When giving the e-learning self-study assignment, it is important to monitor students closely before and during the self-study. In the questionnaire, all students answered that guidance before the e-learning was necessary.

We expected that the students might feel that the length of the self-study period (23 days) for the e-learning system was too short. Contrary to our expectations, most of the students thought the duration to be adequate. However, we still adhere to the maxim “the longer the exposure to English, the better”. For the second preparatory training in 2014 the study period was increased. The students’ responses will be examined at a later date.

This paper reported the results of the KPU inaugural English preparatory training in 2013, which received favorable responses regarding the use of e-learning. This was a pilot study, and we have been improving the program to optimize its impact. A further report will be made after the third year of the study abroad program has been completed in 2015.

ACKNOWLEDGMENTS

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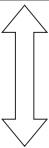
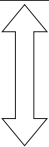
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Appendix 1. Example of Schedule of Study Abroad Program in Boston (2013)

March	Contents (AM)	Contents (PM)
3	Arrival	Orientation on the student service
4	Opening ceremony	Boston city tour
5	Lecture on the pharmacist operation in the United States	English conversation class
6	School visit and student exchange at MCPHS	
7	English conversation class	Visit West Roxbury Pharmacy
8	English conversation class	Visit Brighton Marine Health Center
9	(Saturday) Free day (city tour)	
10	(Sunday) Free day (city tour)	
11	English conversation class	Lecture on basic research at Massachusetts General Hospital
12	Lecture on history of American medicine	Visit Boston Science Museum
13	Review	Closing ceremony

Appendix 2. Example of Schedule of Preparatory Training (2013)

	Time	Contents
November 19		Guidance for the English assignments
		Listening assignment of MCPHS web page 
February 6	09:00–12:30	Lecture on hospital pharmacists in Japan
February 7	09:00–11:00	Lecture on pharmacists/Japanese insurance system
	11:00–12:30	English class
	13:30–15:30	Group discussion
February 8	09:30–11:00	Lecture on the role of pharmacists in the United States/ pharmaceutical education in the United States
	11:00–12:00	Final guidance about the travel
		English E-learning assignment (NetAcademy2) 
March 3		Departure to Boston

Appendix 3. English Assignments in 2013

Materials: ALC NetAcademy2 'Super standard course'

Webpage of MCPHS

Tasks: (1) To study the listening course (at least 20 units) and the reading course (at least 5 units) from 'Super standard course' on ALC NetAcademy2.

(2) To listen to the pharmaceutical students explaining about MCPHS in English and write down the outline of their talks.

Appendix 4. 2013 Questionnaire on the English Preparatory Training for KPU Study Abroad Program

I . About the English assignments

1. Were the following assignments useful for the study abroad program?

(1) Listening of the students' interviews on MCPHS webpage

(a) Very useful (b) Somewhat useful (c) Somewhat unuseful (d) Unuseful

(The same 4 possible answers for:)

(2) Listening of English e-learning (Net Academy2)

(3) Reading of English e-learning (Net Academy2)

II . About the self-learning using the e-learning system

1. Did the English listening e-learning improve your listening ability?

(a) Greatly improved (b) Slightly improved (c) Not improved (d) Other

2. What do you think about the length of e-learning (23 days)?

(a) Too short (b) Just right (c) Too long (d) Other

3. Were there any problems when you studied e-learning at home?

(a) No (b) Yes

4. Is guidance before self-study of e-learning necessary?

(a) Very necessary (b) Somewhat necessary (c) Not necessary

(d) Other

6. What kind of support is necessary before self-study of e-learning?